

Exercise walk-through

The Internal Structure of Cities ■ 6.5

eXercise

You must be able to

- describe the **concentric zone model** 同心圆模型
- describe the **sector model** 扇形模型
- describe the **multiple nuclei model** 多核心模型
- match a city description to a model

Method — Concentric zone model

The **concentric zone model** has rings around a central business district (CBD): a transition zone, then working-class, better housing, and commuter rings outward.

Method — Sector model

The **sector model** shows land use in wedges radiating from the CBD along transport routes, so similar uses line up in strips.

Method — Multiple nuclei model

The **multiple nuclei model** has several centres (nodes), not just one CBD — an airport, a university, an industrial park each anchor their own district.

Practice 2.1 ■ 2 marks

Describe the concentric zone model.

Solution 2.1

Method: Concentric zone model

Worked steps

rings of land use around a central CBD **B1**, from transition/working-class to wealthier commuter zones outward **B1**.

Practice 2.2 ■ 2 marks

State how the sector model differs from the concentric zone model.

Solution 2.2

Method: Concentric zone model

Worked steps

the sector model uses wedges along transport routes **B1** instead of complete rings **B1**.

Practice 2.3 ■ 1 mark

A city has grown around several separate centres — a port, an airport, and a university district.

- (a) Which model fits best?
- (b) Explain why.

Solution 2.3

Method: Multiple nuclei model

Worked steps

(a) the multiple nuclei model **B1**. (b) growth is anchored on several nodes, not a single CBD **B1**.

Exam-style 3.1 ■ 1 mark

A model showing land use as wedges radiating out along transport lines is the

A concentric zone model

B sector model

C multiple nuclei model

D gravity model

Solution 3.1

Method: Sector model

A concentric zone model

B sector model 

C multiple nuclei model

D gravity model

Worked steps

B. wedges along transport routes = sector model.

Exam-style 3.2 ■ 1 mark

The concentric zone model is organized around a single

- A** airport
- B** central business district
- C** greenbelt
- D** relict boundary

Solution 3.2

Method: Concentric zone model

A airport

B central business district



C greenbelt

D relict boundary

Worked steps

B. the concentric zone model centres on the CBD.

Exam-style 3.3 ■ 1 mark

A modern city has many edge nodes rather than one dominant centre.

- (a) Name the model that best describes it.
- (b) State one strength of this model over the concentric model.

Solution 3.3

Worked steps

(a) multiple nuclei model **B1**. (b) it better fits modern cities with several centres and cars, not one CBD **B1**.